

CompactFlash™ Card W7B6-S Series

16MByte/32MByte/48MByte/64MByte/96MByte/128MByte/160MByte/224MByte

Version:1.02 (June, 2001)

Description

CompactFlash™ Card W7B6-S series were made by Wintec Industries in Fremont, CA USA. It complies with CompactFlash™ specification, and is suitable for the usage of data storage memory medium for PC or any other electric equipment and digital camera. This card is equipped with 128/256/512 Mega bits Flash memory. This card is suitable for ISA (Industry Standard Architecture) bus interface standard, and read/write unit is 1 sector (512 bytes) sequential access. By using this card it is possible to operate good performance for the system which have CompactFlash™ slots.

Note: CompactFlash™ is licensed royalty free to the CFA which in turn will license it royalty-free to CFA members.

*CFA: CompactFlash™ Association.

Features

CompactFlash™ specification type I (3.3 mm) standard.

3.3V / 5V single power supply operation

Card density is 224 Mega bytes maximum

Three variations of mode access which are memory card mode, I/O card mode and true IDE mode

Fast ATA host-to-buffer transfer rates supporting PIO 4 in True-IDE mode

High reliability based on internal ECC (Error Correcting Code) function

Integrated 512 Byte PCMCIA Sector Buffer and 256 Byte PCMCIA Attribute Memory

PCMCIA Configuration Option Register, Card Configuration and Status Register and

Pin Replacement Register support

Automatic power-down mode and sleep mode

Compact Flash Card W7B6-S Series List

Part Number	Card Capacity	Real Capacity	Total Sectors	Sectors	Headers	Cylinders	Performance (Qbench)
			Card	Track			
W7B6016M1XG-S7	16M byte	16,187,392	31,616	32	4	247	2439KB/sec
W7B6032M1XG-S7	32M byte	32,636,928	63,744	32	4	498	2347KB/sec
W7B6048M1XG-S7	48M byte	49,086,464	95,872	32	4	749	2357KB/sec
W7B6064M1XG-S7	64M byte	65,536,000	128,000	32	4	1000	2298KB/sec
W7B6032M1XG-S8	32M byte	32,702,464	63,872	32	4	499	3112KB/sec
W7B6064M1XG-S8	64M byte	65,667,072	128,256	32	4	1002	3053KB/sec
W7B6096M1XG-S8	96M byte	98,598,912	192,576	32	6	1003	2944KB/sec
W7B6128M1XG-S8	128M byte	131,596,288	257,024	32	8	1004	2971KB/sec
W7B6096M1XG-S9	96M byte	98,598,912	192,576	32	6	1003	3120KB/sec
W7B6160M1XG-S9	160M byte	157810688	308224	32	16	602	3016KB/sec
W7B6224M1XG-S9	224M byte	220987392	431616	32	16	843	3114KB/sec

Notes : 1. Total sectors/card = sectors/Track * number of head * number of cylinder.

2. The logical address capacity including the area used for file system.

Card Pin Assignment

PC Card Memory Mode			PC Card I/O Mode			True IDE mode		
PIN	Signal	Type	PIN	Signal	Type	PIN	Signal	Type
1	GND	Power	1	GND	Power	1	GND	Power
2	D03	I/O	2	D03	I/O	2	D03	I/O
3	D04	I/O	3	D04	I/O	3	D04	I/O
4	D05	I/O	4	D05	I/O	4	D05	I/O
5	D06	I/O	5	D06	I/O	5	D06	I/O
6	D07	I/O	6	D07	I/O	6	D07	I/O
7	-CE1	I	7	-CE1	I	7	-CE0	I
8	A10	I	8	A10	I	8	A10 ¹	I
9	-OE	I	9	-OE	I	9	-ATASEL	I
10	A09	I	10	A09	I	10	A09 ¹	I
11	A08	I	11	A08	I	11	A08 ¹	I
12	A07	I	12	A07	I	12	A07 ¹	I
13	VCC	Power	13	VCC	Power	13	VCC	Power
14	A06	I	14	A06	I	14	A06 ¹	I
15	A05	I	15	A05	I	15	A05 ¹	I
16	A04	I	16	A04	I	16	A04 ¹	I
17	A03	I	17	A03	I	17	A03 ¹	I
18	A02	I	18	A02	I	18	A02	I
19	A01	I	19	A01	I	19	A01	I
20	A00	I	20	A00	I	20	A00	I
21	D00	I/O	21	D00	I/O	21	D00	I/O
22	D01	I/O	22	D01	I/O	22	D01	I/O
23	D02	I/O	23	D02	I/O	23	D02	I/O
24	WP	O	24	-IOIS16	O	24	-IOCS16	O
25	-CD2	O	25	-CD2	O	25	-CD2	O
26	-CD1	O	26	-CD1	O	26	-CD1	O
27	D11	I/O	27	D11	I/O	27	D11	I/O
28	D12	I/O	28	D12	I/O	28	D12	I/O
29	D13	I/O	29	D13	I/O	29	D13	I/O
30	D14	I/O	30	D14	I/O	30	D14	I/O
31	D15	I/O	31	D15	I/O	31	D15	I/O
32	-CE2	I	32	-CE2	I	32	-CS1	I
33	-VS1	O	33	-VS1	O	33	-VS1	O
34	-IORD	I	34	-IORD	I	34	-IORD	I
35	-IOWR	I	35	-IOWR	I	35	-IOWR	I
36	-WE	I	36	-WE	I	36	-WE ³	I

PC Card Memory Mode			PC Card I/O Mode			True IDE mode		
37	RDY/BSY	O	37	IREQ	O	37	INTRQ	O
38	VCC	Power	38	VCC	Power	38	VCC	Power
39	-CSEL	I	39	-CSEL	I	39	-CSEL	I
40	-VS2	O	40	-VS2	O	40	-VS2	O
41	RESET	I	41	RESET	I	41	RESET	I
42	-WAIT	O	42	-WAIT	O	42	IORDY	O
43	-INPACK	O	43	-INPACK	O	43	-INPACK	O
44	-REG	I	44	-REG	I	44	-REG ²	I
45	BVD2	I/O	45	-SPKR	I/O	45	-DASP	I/O
46	BVD1	I/O	46	-STSCHG	I/O	46	-PDIAG	I/O
47	D08	I/O	47	D08	I/O	47	D08	I/O
48	D09	I/O	48	D09	I/O	48	D09	I/O
49	D10	I/O	49	D10	I/O	49	D10	I/O
50	GND	Power	50	GND	Power	50	GND	Power

Note 1. Should be grounded by the host.

2. Should be tied VCC by the host.

Card Pin Explanation

Signal name	Direction	Pin No.	Description
A10 to A0 (PC Card Memory mode)	I	8,10,11,12,14,15 ,16,17,18,19, 20	Address bus is A10 to A0. A10 is MSB and A0 is LSB.
A10 to A0 (PC Card I/O mode)			
A2 to A0 (True IDE mode)		18, 19, 20	Address bus is A10 to A0. Only A2 to A0 are used, A10 to A3 should be grounded by the host.
BVD1 (PC Card Memory mode)	I/O	46	46 BVD1 outputs the battery voltage status in the card. This output line is constantly driven to a high state since a battery is not required for this product.
-STSCHG (PC Card I/O mode)			-STSCHG is used for changing the status of Configuration and status register in attribute area.
-PDIAG (True IDE mode)			-PDIAG is the Pass Diagnostic signal in Master/Slave handshake protocol.
BVD2 (PC Card Memory mode)	I/O	45	BVD2 outputs the battery voltage status in the card. This output line is constantly driven to a high state since a battery is not required for this product.
-SPKR (PC Card I/O mode)			-SPKR outputs speaker signals. This output line is constantly driven to a high state since this product does not support the audio function.
-DASP (True IDE mode)			-DASP is the Disk Active/Slave Present signal in the Master/Slave handshake protocol.
-CD1, -CD2 (PC Card Memory mode)	O	25, 26	-CD1 and -CD2 are the card detection signals. -CD1 and -CD2 are connected to ground in this card, so host can detect that the card is inserted or not.
-CD1, -CD2 (PC Card I/O mode)			
-CD1, -CD2 (True IDE mode)			
-CE1, -CE2 (PC Card Memory mode) Card Enable	I	7, 32	-CE1 and -CE2 are low active card select signals. Byte/Word/Odd byte mode are defined by combination of -CE1, -CE2 and A0.
-CE1, -CE2 (PC Card I/O mode) Card Enable			
-CE1, -CE2 (True IDE mode)			-CE2 is used for select the Alternate Status Register and the Device Control Register while -CE1 is the chip select for the other task file registers.

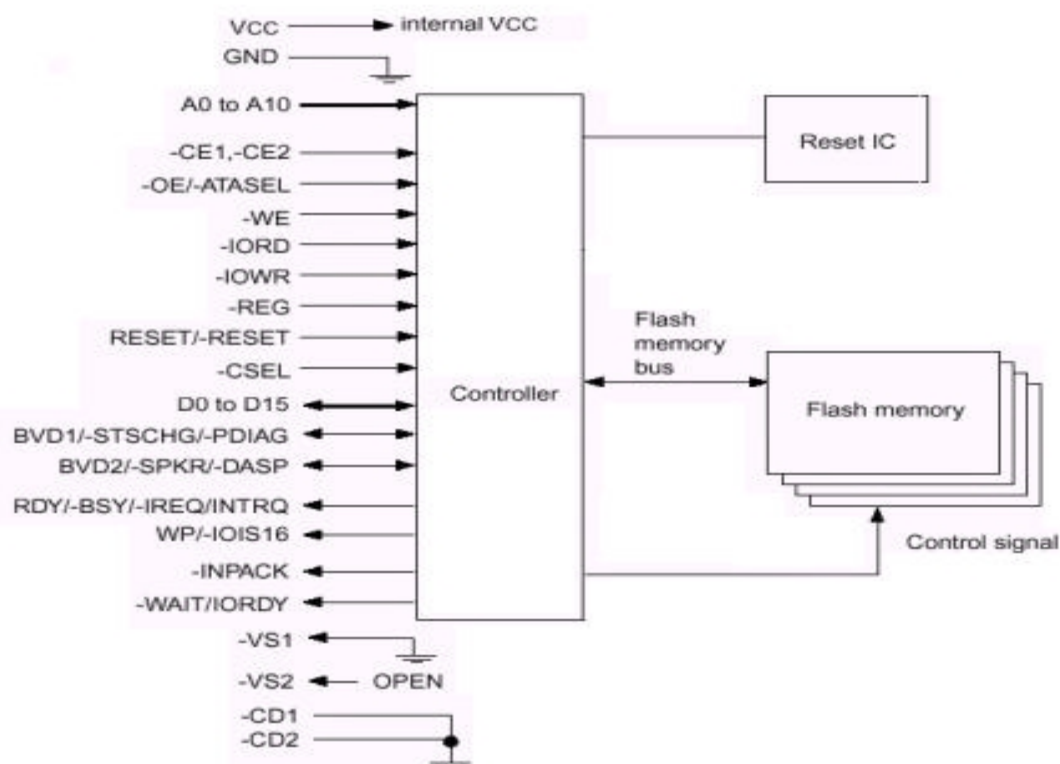
Signal name	Direction	Pin No.	Description
-CSEL (PC Card Memory mode)	I	39	This signal is not used.
-CSEL (PC Card I/O mode)			
-CSEL (True IDE mode)			This signal is used to configure this device as a Master or a Slave when configured in the True IDE mode. When this pin is grounded, this device is configured as a Master. When the pin is open, this device is configured as a Slave.
D15 to D0 (PC Card Memory mode)	I/O	31,30, 29, 28,27, 49,48, 47, 6,5, 4, 3, 2, 23, 22,21	Data bus is D15 to D0. D0 is the LSB of the even byte of the word. D8 is the LSB of the odd byte of the word.
D15 to D0 (PC Card I/O mode)			
D15 to D0 (True IDE mode)			
GND (PC Card Memory mode)	—	1,50	Ground
GND (PC Card I/O mode)			
(True IDE mode)			
-INPACK (PC Card Memory mode)	O	43	This signal is not used and should not be connected at the host.
-INPACK (PC Card I/O mode)			Input Acknowledge. This signal is asserted low by this card when the card is selected and responding to an I/O read cycle at the address that is on the address bus during -CE and -IORD are low. This signal is used for the input data buffer control.
-INPACK (True IDE mode)			This signal is not used and should not be connected at the host.
-IORD (PC Card Memory mode)	I	34	This signal is not used.
-IORD (PC Card I/O mode)			-IORD is used for control of read data in I/O task file area. This card does not respond to -IORD until I/O card interface setting up.
-IORD (True IDE mode)			-IORD is used for control of read data in I/O task file area. This card does not respond to -IORD until True IDE interface setting up.

Signal name	Direction	Pin No.	Description
. -IOWR (PC Card Memory mode)	I	35	This signal is not used.
-IOWR (PC Card I/O mode)			-IOWR is used for control of data write in I/O task file area. This card does not respond to -IOWR until I/O card interface setting up.
-IOWR (True IDE mode)			-IOWR is used for control of data write in I/O task file area. This card does not respond to -IOWR until True IDE interface setting up.
-OE (PC Card Memory mode)	I	9	-OE is used for the control of reading register's data in attribute area or task file area.
-OE (PC Card I/O mode)			-OE is used for the control of reading register's data in attribute area.
-ATASEL (True IDE mode)			To enable True IDE mode this input should be grounded by the host.
RDY/-BSY (PC Card Memory mode)	O	37	The signal is RDY/-BSY pin. RDY/-BSY pin turns low level during the card internal initialization operation at VCC applied or reset applied, so next access to the card should be after the signal turned high level
-IREQ (PC Card I/O mode)			This signal is active low -IREQ pin. The signal of low level indicates that the card is requesting software service to host, and high level indicates that the card is not requesting.
INTRQ (True IDE mode)			This signal is the active high Interrupt Request to the host
-REG (PC Card Memory mode) Attribute memory select	I	44	-REG is used during memory cycles to distinguish between task file and attribute memory accesses. High for task file, Low for attribute memory is accessed.
-REG (PC Card I/O mode)			-REG is constantly low when task file or attribute memory is accessed.
-REG (True IDE mode)			This input signal is not used and should be connected to VCC.

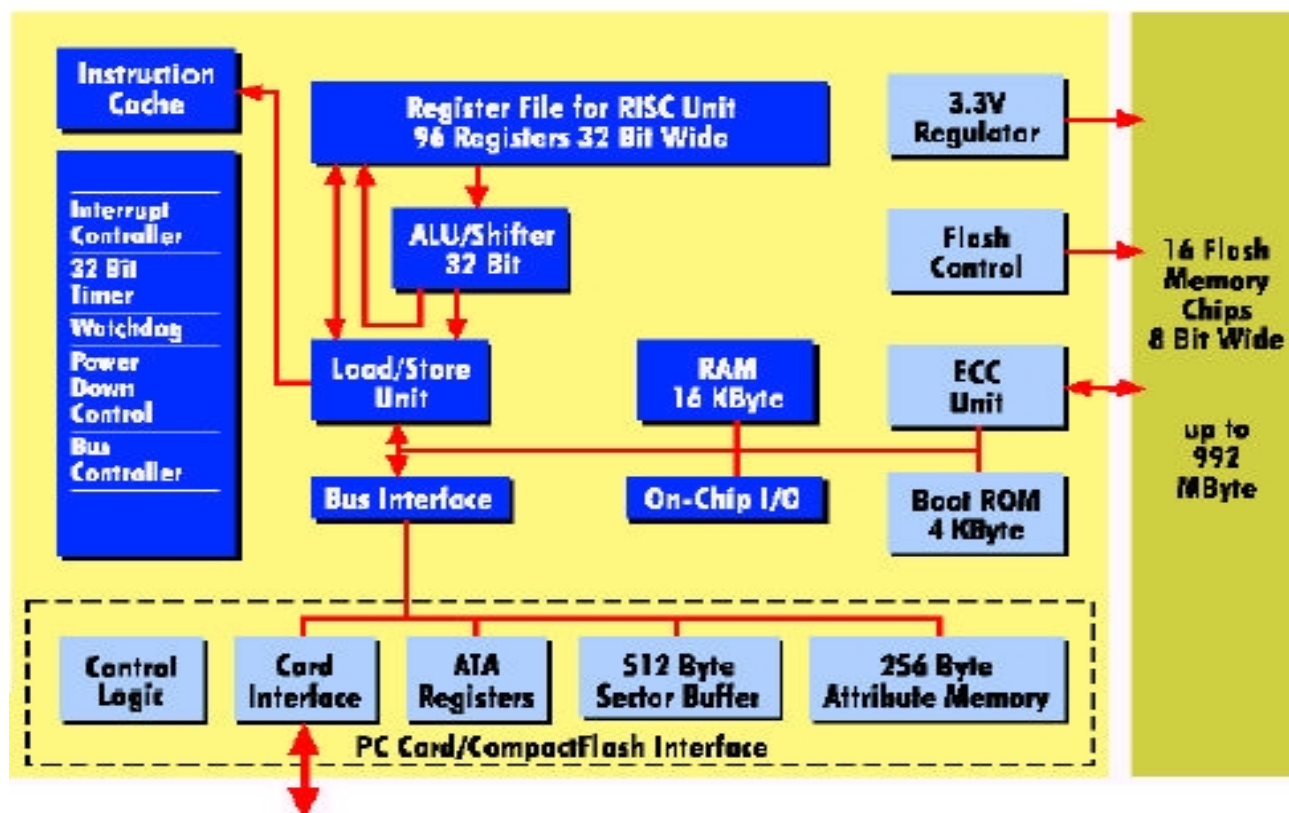
Signal name	Direction	Pin No.	Description
RESET (PC Card Memory mode)	I	41	This signal is active high RESET pin. If this signal is asserted high, the card internal initialization begins to operate. During the card internal initialization RDY/-BSY is low. After the card internal initialization RDY/-BSY is high.
RESET (PC Card I/O mode)			This signal is active high RESET pin. If this signal is asserted high, the card internal initialization begins to operate. In this mode, RDY/-BSY signal can not be used, so using Status Register the Ready/Busy status can be confirmed.
-RESET (True IDE mode)			This signal is active low -RESET pin. If this signal is asserted low, all the register's in this card are reset. In this mode, RDY/ -BSY signal can not be used, so using status register the Ready/Busy status can be confirmed.
VCC (PC Card Memory mode)	—	13, 38	+5 V, +3.3 V power.
VCC (PC Card I/O mode)			
VCC (True IDE mode)			
-VS1, -VS2 (PC Card Memory mode)	O	33, 40	These signals are intended to notify VCC requirement to ost. -VS1 is held grounded and -VS2 is nonconnected in this card.
-VS1, -VS2 (PC Card I/O mode)			
-VS1, -VS2 (True IDE mode)			
-WAIT (PC Card Memory mode)	O	42	This signal is active low -WAIT pin. In this card this signal is constantly high level.
-WAIT (PC Card I/O mode)			
IORDY (True IDE mode)			This output signal may be used as IORDY. In this card this signal is constantly high impedance.
-WE (PC Card Memory mode)	I	36	-WE is used for the control of writing register's data in attribute memory area or task file area.
-WE (PC Card I/O mode)			-WE is used for the control of writing register's data in attribute memory area.
-WE (True IDE mode)			This input signal is not used and should be connected to VCC by the host.

Signal name	Direction	Pin No.	Description
WP (PC Card Memory mode) Write Protect	O	24	WP is held low because this card does not have write protect switch.
-IOIS16 (PC Card I/O mode)			-IOIS16 is asserted when task file registers are accessed in 16-bit mode.
-IOIS16 (True IDE mode)			This output signal is asserted low when this device is expecting a word data transfer cycle. Initial mode is 16-bit. If the user issues a Set Feature Command to put the device in Byte access mode, the card permits 8-bit accesses.

Card Block Diagram



Note: -CE1, -CE2, -OE, -WE, -IORD, -IOWR, -REG, RESET, -CSEL, -PDIAG, -DASP pins are pulled up in card. -CE1, -CE2, -OE, -WE, -IORD, -IOWR, -REG pins are schmitt trigger type input buffer.



DC Characteristics

Absolute Maximum Ratings

Case temperature TC under Bias:	0°C to +70°C
extended temperature range on request	
Operating Temperature:	0°C to +70°C
Storage Temperature:	-40°C to +85°C
Voltage on any Pin with respect to ground:	-0.5V to VCC + 0.5V

D.C. Parameters

Supply Voltage VCC : 5V +/- 10% or 3.3V +/- 5%

Case Temperature T CASE : 0°C to +70°C

Parameter	Symbol	Min	Max	Unit	Note
Input LOW Voltage	V _{IL}	-0.3	+0.8	V	
Input HIGH Voltage	V _{IH}	2.0	V _{CC} + 0.3	V	
Output LOW Voltage	V _{OL}		0.45	V	at 4mA
Output HIGH Voltage	V _{OH}	2.4		V	at 1mA
Operating Current, V _{CC} = 5.0V Sleep mode Standby (power down) Operating	I _{CC}		0.2 15 65	mA mA mA	10 MHz power-down clock 20 MHz operating clock
Operating Current, V _{CC} = 3.3V Sleep mode Standby (power down) Operating	I _{CC}		0.2 8 40	mA mA mA	10 MHz power-down clock 20 MHz operating clock
Input Leakage Current	I _{LI}		10	μA	
Output Leakage Current	I _{LO}		±10	μA	
Input/output Capacitance	C _{I/O}		10	pF	

AC Characteristics

The AC Characteristics reference the timing diagrams of the PCMCIA PC Card Standard and the symbols in these timing diagrams. The AC characteristics are valid for a supply voltage V_{CC} 5V or 3.3V $\pm 5\%$

Attribute Memory Read and Write AC Characteristics

Parameter	Symbol	Min	Max	Unit
Read cycle time	tcR	250		ns
Address access time	ta(A)		250	ns
Card Enable access time	ta(CE)		250	ns
Output Enable access time	ta(OE)		125	ns
Output disable time from CE	tdis(CE)		100	ns
Output disable time from OE	tdis(OE)		100	ns
Output enable time from CE	ten(CE)	5		ns
Output enable time from OE	ten(OE)	5		ns
Data valid time from address change	tv(A)	0		ns
Address setup time	tsu(A)	30		ns
Address hold time	th(A)	20		ns
Card Enable setup time	tsu(CE)	0		ns
Card Enable hold time	th(CE)	20		ns
Write cycle time	tcW	250		ns
Write pulse time	tw(WE)	150		ns
Address setup time for WE	tsu(A-WEH)	180		ns
Card Enable setup time for WE	tsu(CE-WEH)	180		ns
Data setup time for WE	tsu(D-WEH)	80		ns
Data hold time	th(D)	30		ns
Output disable time from WE	tdis(WE)		100	ns
Output enable time from WE	ten(WE)	5		ns
Output Enable setup time for WE	tsu(OE-WE)	10		ns
Output Enable hold time from WE	th(OE-WE)	10		ns

Common Memory Read and Write AC Characteristics

Parameter	Symbol	Min	Max	Unit
Read cycle time	tcR	150		ns
Address access time	ta(A)		150	ns
Card Enable access time	ta(CE)		150	ns
Output Enable access time	ta(OE)		75	ns
Output disable time from CE	tdis(CE)		75	ns
Output disable time from OE	tdis(OE)		75	ns
Output enable time from CE	ten(CE)	5		ns
Output enable time from OE	ten(OE)	5		ns
Data valid time from address change	tv(A)	0		ns
Address setup time	tsu(A)	20		ns
Address hold time	th(A)	20		ns
Card Enable setup time	tsu(CE)	0		ns
Card Enable hold time	th(CE)	20		ns
Write cycle time	tcW	150		ns
Write pulse time	tw(WE)	80		ns
Address setup time for WE	tsu(A-WEH)	100		ns
Card Enable setup time for WE	tsu(CE-WEH)	100		ns
Data setup time for WE	tsu(D-WEH)	50		ns
Data hold time	th(D)	20		ns
Write recover time	trec(WE)	20		ns
Output disable time from WE	tdis(WE)		75	ns
Output enable time from WE	ten(WE)	5		ns
Output Enable setup time for WE	tsu(OE-WE)	10		ns
Output Enable hold time from WE	th(OE-WE)	10		ns

I/O Access Read and Write AC Characteristics

Parameter	Symbol	Min	Max	Unit
Data delay after IORD	td(IORD)		100	ns
Data hold following IORD	th(IORD)	0		ns
IORD pulse width	tw(IORD)	165		ns
Address setup time for IORD	tsuA(IORD)	70		ns
Address hold time from IORD	thA(IORD)	20		ns
Card Enable setup time for IORD	tsuCE(IORD)	5		ns
Card Enable hold time from IORD	thCE(IORD)	20		ns
REG setup time for IORD	tsuREG(IORD)	5		ns
REG hold time from IORD	thREG(IORD)	0		ns
INPACK delay falling from IORD	tdflNP(IORD)	0	45	ns
INPACK delay rising from IORD	tdrlNP(IORD)		45	ns
IOIS16 delay falling from address	tdflIO16(IORD)		35	ns
IOIS16 delay rising from address	tdrlIO16(IORD)		35	ns
Data setup time for IOWR	tsu(IOWR)	60		ns
Data hold time from IOWR	th(IOWR)	30		ns
IOWR pulse width	tw(IOWR)	165		ns
Address setup time for IOWR	tsuA(IOWR)	70		ns
Address hold time from IOWR	thA(IOWR)	20		ns
Card Enable setup time for IOWR	tsuCE(IOWR)	5		ns
Card Enable hold time from IOWR	thCE(IOWR)	20		ns
REG setup time for IOWR	tsuREG(IOWR)	5		ns
REG hold time from IOWR	thREG(IOWR)	0		ns

True-IDE Mode I/O Access Read and Write AC Characteristics

Parameter	Symbol	Min	Max	Unit
Cycle time	tcR	120		ns
Address setup time for IORD/IOWR	tsuA	25		ns
Address hold time from IORD/IOWR	thA	10		ns
IORD/IOWR pulse width	tw	70		ns
IORD/IOWR recovery time	trec	25		ns
Data setup time for IORD	tsuD(IORD)	20		ns
Data hold following IORD	thD(IORD)	5		ns
Output disable time from IORD	tdis(IORD)		30	ns
Data setup time for IOWR	tsuD(IOWR)	20		ns
Data hold following IOWR	thD(IOWR)	10		ns

Compatibility list

PCs			
Vendor	Device	Operating environment	
		OS	OS Vendor
Apple	PowerBook G3/266, G3/250, G3/233	Mac.OS8	Apple
	PowerBook 5300	KanjiTalk7.5.2	Apple
	PowerBook 3400c/240, 2400c/180	KanjiTalk7.6	Apple
	PowerBook 1400cs	KanjiTalk7.5.3	Apple
	PowerBook 190	KanjiTalk7.5.2	Apple
	Performa6210	KanjiTalk7.5.1	Apple
CANON	INNOVA NOTE 5500GX, 3800, 3600CX, 3500FX, 3400CX	Windows 95B	Microsoft
	DUO2300	Windows 95B	Microsoft
CASIO	CASSIOPEIA FIVE(MPC-101M3)	Windows 98	Microsoft
COMPAQ	ARMADA 4130T	Windows 95	Microsoft
	ARMADA 1590DMT, 1520DM	Windows 95B	Microsoft
	PRESARIO 1805, 1636, 1235, 1230	Windows 98	Microsoft
	PRESARIO 1680, 1621	Windows 95B	Microsoft
	PRESARIO 1636, 1230	Windows 95C	Microsoft
DEC	HiNoteUltra II LTS5150	Windows 95	Microsoft
DELL	INSPIRON 3200 D266XT, 3000	Windows 95B	Microsoft
EPSON	ViViDY Note590STX	Windows 95	Microsoft
	PROSPERT NOTE N16X	Windows 95B	Microsoft
Fujitsu	FMV-NC13D, NC313	Windows 95B	Microsoft
	FMV-NE VII 20D	Windows 98	Microsoft
	FMV-NP13	Windows 95B	Microsoft
	FMV-NU13D3, NU3133, NUV16	Windows 95B	Microsoft
	FMV-5233NA6/X, 5150NA3/W, 5150NA/X, 5133NU5/W	Windows 95B	Microsoft
GATEWAY2000	Solo 2100	Windows 95B	Microsoft
Hitachi	FLORA Prius Note 270(PCT-2702T32H)	Windows 98	Microsoft
	FLORA Prius Note 250(PC-5NU01-YA)	Windows 95B	Microsoft
	FLORA Prius Note 210(PCT-2109T23)	Windows 98	Microsoft
	FLORA Prius Note 20J(PCT-202T26J)	Windows 98	Microsoft
	FLORA 250, 230, 210	Windows 95B	Microsoft
	FLORA Prius Note 500NK3M	Windows 95B	Microsoft
	FLORA 270(PC-7NH04QE7LA)	Windows 95B	Microsoft
	FLORA Note NS1	MS-DOC6.20	Phoenix
IBM	ThinkPad 770	Windows 95B	Microsoft
	ThinkPad 600, 560cs, 535, 365, 235	Windows 95	Microsoft

IBM	ThinkPad 535X, 315, 535E	Windows 95B	Microsoft
	ThinkPad 530CS	PC-DOS7	IBM
	ThinkPad 360P	PC-DOS6.3	IBM
Mitsubishi	AMITY VP, CN, CN II	Windows 95B	Microsoft
	Pedion(M3041-Q73S1)	Windows 95B	Microsoft
	Apricot Note AL(F3X), AL(F3Y)	Windows 95B	Microsoft
NEC	PC9821 Nr12, Nr166	Windows 95	Microsoft
	PC9821Nr13/D108	Windows 95B	Microsoft
	PC9821NW133, NW150/S20D	Windows 95B	Microsoft
	PC9821LS150/S14C2	Windows 95B	Microsoft
	PC-AL13C(Aile NX), AL20C(Aile NX)	Windows 95B	Microsoft
	PC-LV13C/16C/20C(La Vie NX)	Windows 95B	Microsoft
	PC-LW23/43D(La Vie NX)	Windows 98	Microsoft
	PC-VP23(VersaPro NX)	Windows 95B	Microsoft
Panasonic	Let's note ace(AI -N3T516J5)	Windows 95B	Microsoft
	Let's note ace(AI -N3T520J5), (AI-N3T520J5A)	Windows 95B	Microsoft
	Let's note comm/C33(CF -C33J8C)	Windows 98	Microsoft
	Let's note mini(AL-N4T512J5)	Windows 95B	Microsoft
	Let's note mini/M32(CF -M32J5)	Windows 95B	Microsoft
	Let's note (AL -N2T515J5)	Windows 95B	Microsoft
	Let's note (AL -N1)	Windows 95A	Microsoft
	Let's note (AL -N2T516J5), (AL-N2T520J5)	Windows 95B	Microsoft
	Let's noteS/21(CF -S21J5)	Windows 95B	Microsoft
Proside	WIN5420T1300	Windows 95B	Microsoft
Sanyo	Winkey MBC-S770	Windows 95	Microsoft
Sharp	MebiusNote 8000, 7860, 7760, 7750, 5500, 5410K, 5100, 710-M23, 550X26, 350X16, 340X15, 330X13	Windows 95B	Microsoft
	MebiusNote7350	Windows 95	Microsoft
	MebiusNote(PC-K500)	Windows 95B	Microsoft
	PC-JP1	Windows 95B	Microsoft
SII	BrainPad TiPO	B-right	Origianl
SONY	VAIO PCG-808	Windows 98	Microsoft
	VAIO PCG-726, 723, 719, 707, 505X, 505EX, 505	Windows 95B	Microsoft
	VAIO PCG-505GX, 505G	Windows 98	Microsoft
	VAIO PCG-C1	Windows 98	Microsoft
SOTEC	WinBook S	MS-DOC6.20	Systemsoft
Toshiba	DynaBook SS Portege 6000CT, 3010CT	Windows 98	Microsoft

Toshiba	DynaBook Satellite 4000CDT/4.0, 325CDT/4.0	Windows 98	Microsoft
	Satellite Pro 460CDT	Windows 95B	Microsoft
	Satellite 310CDT, 300CDT	Windows 95B	Microsoft
	Satellite 110CS	Windows 95	Microsoft
	TECRA 780DVD, 750CT, 740CT	Windows 95B	Microsoft
	TECRA 720CDT	Windows 95	Microsoft

PDAs & Handheld PCs

Vendor	Device	Operating environment	
		OS	OS Vendor
CASIO	CASSIOPEIA (Jap.) A-55	Windows CE2.0	Microsoft
	CASSIOPEIA (Jap.) A-51	Windows CE1.0	Microsoft
	CASSIOPEIA (Jap.) A-5	Windows CE2.0	Microsoft
	CASSIOPEIA (Engl.) A-20, A-11	Windows CE2.0	Microsoft
	CASSIOPEIA (Engl.) A-11	Windows CE1.0	Microsoft
	CASSIOPEIA (PA-2100)	Windows CE1.0	Microsoft
COMPAQ	C series 810	Windows CE2.0	Microsoft
Fujitsu	INTER Top mode120	MS-DOS6.2	Microsoft
Hitachi	PERSONA(HPW-200JC)	Windows CE2.0	Microsoft
HP	620LX(English /Japanese)	Windows CE2.0	Microsoft
	Jornada 820, 680	Windows CE2.0	Microsoft
	320LX, 300LX	Windows CE1.0	Microsoft
	200LX	MS-DOS5	HP
IBM	Palm Top110	PC-DOS7	IBM
NEC	Mobile GearII (MC-R500)	Windows CE2.0	Microsoft
	Mobile GearII (MC-R300), (MC-CS12), (MC-S13), (MC-MK23)	Windows CE1.0	Microsoft
	Mobile Pro400	Windows CE1.0	Microsoft
	Mobio NX	Windows 95B	Microsoft
Philips	Nino320	Windows CE2.0	Microsoft
Psion	Series 7	Original	Original
Toshiba	Libretto 100 CTA, 70 CTA, 50 CTA	Windows 95B	Microsoft
	Libretto 20 CTA	Windows 95	Microsoft

Digital Cameras

Vendor	Device	Operating environment	
		OS	OS Vendor
AGFA	CL30	Original	Original
CANON	PowerShot 600, 600N	Original	Original

CANON	PowerShot 350	Original	Original
CASIO	QV-700	Original	Original
EPSON	CP-700Z	Original	Original
	CP-600	Original	Original
Fuji-Film	FUJIX DS-300	Original	Original
Hitachi	MP-EG1 *1	Original	Original
Kodak	DC260 ZOOM	Original	Original
	DC220 ZOOM	Original	Original
	DC210A ZOOM	Original	Original
	DC210 ZOOM	Original	Original
	DC200, DC50, DC25	Original	Original
Konica	Q-mini	Original	Original
	Q-M100	Original	Original
Mitsubishi	DJ1000	Original	Original
NEC	PC-DC401	Original	Original
	Picona	Original	Original
Nikon	COOL PIX910	Original	Original
	COOL PIX910	Original	Original
	COOL PIX600	Original	Original
Olympus	C 2500	Original	Original
Panasonic	Card Shot	Original	Original
	COOLSHOT II	Original	Original
	COOLSHOT II mega	Original	Original
Polaroid	PDC 1100	Original	Original
RICOH	DC-2/2L/2E/2V/2S *2	Original	Original

Digital Photo Printer

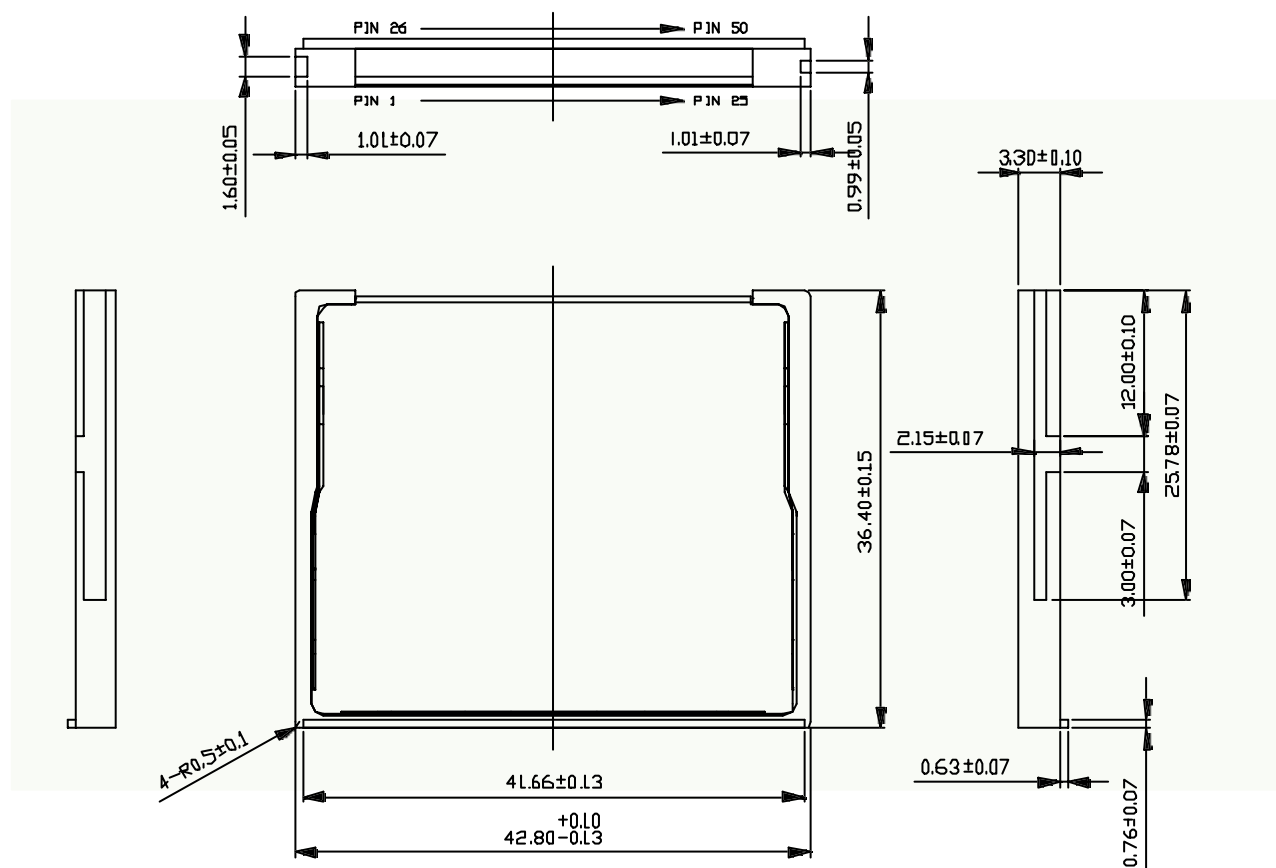
Vendor	Device	Operating environment	
		OS	OS Vendor
CANON	DC-200	Original	Original
KODAK	DPP-1-J	Original	Original

PC Card Reader / Writer

Vendor	Model	OS	Adapter	System
Hitachi	FLORA DeskTop1010	MS-DOS6.20	<i>Intermart</i>	KERNEL PCD500
			<i>RATOC</i>	REX-5051F
			<i>GreyStone</i>	Card Dock
			<i>I/O DATA</i>	C-Dock/DV
			<i>Adotec</i>	AM1-92(RAM-ZO)
		Windows 3.1	<i>Intermart</i>	KERNEL PCD500

			<i>RATOC</i>	REX-5051F
<i>Hitachi</i>	FLORA DeskTop1010	Windows 3.1	<i>GreyStone</i>	Card Dock
			<i>I/O DATA</i>	C-Dock/DV
			<i>Adotec</i>	AM1-92(RAM-ZO)
<i>IBM</i>	Aptiva	Windows 95B	<i>ADO</i>	FLASH MATE 2000
<i>Toshiba</i>	BREZZA	Windows 95B	<i>RATOC</i>	REX-251
				REX-5051F

Physical Outline



Revision History

Revision 1.01 (March, 2001)

- New release.

Revision 1.02 (June, 2001)

- Changed Order Part Number:

Old Order Part Number	New Order Part Number
W7B6016M1XG-S128	W7B6016M1XG- S7
W7B6032M1XG-S128	W7B6032M1XG-S7
W7B6048M1XG-S128	W7B6048M1XG-S7
W7B6064M1XG-S128	W7B6064M1XG-S7
W7B6032M1XG-S256	W7B6032M1XG- S8
W7B6064M1XG-S256	W7B6064M1XG-S8
W7B6096M1XG-S256	W7B6096M1XG-S8
W7B6128M1XG-S256	W7B6128M1XG-S8
W7B6096M1XG-S512	W7B6096M1XG- S9
W7B6160M1XG-S512	W7B6160M1XG-S9
W7B6224M1XG-S512	W7B6224M1XG-S9

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